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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10756,998	01/13/2004	Delbert C. Scranton JR.	43640/45781	3719

7590 03/11/2005

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EXAMINER

JOHNSON, EDWARD M

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/756,998

Applicant(s)

SCRANTON, DELBERT C.

Examiner

Edward M. Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 38-40 is/are allowed.
- 6) ☒ Claim(s) 30-36 and 41 is/are rejected.
- 7) ☒ Claim(s) 37 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 30-36 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuda et al. US 4,187,282.

Regarding claims 30 and 41, Matsuda '282 discloses an adsorbent for sulfur oxides comprising iron oxide and copper oxide, wherein the copper oxide may be present in an amount of 2-50% or 4-50% (see column 3, lines 26-29).

Regarding claims 31-35, Matsuda '282 discloses CuO and cupric nitrate and sulfate (see column 3, lines 1-30 and Examples 6 and 7). Matsuda does not disclose the oxide product present in the CuO.

Regarding claim 36, Matsuda '282 discloses iron oxide and titanium oxide present in a 8:2 ratio, and that copper oxide may be present in an amount of 2-50% or 4-50% (see column 3, lines 26-29).

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3. Claims 30-35 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Araki et al. US 4,149,997.

Regarding claim 30 and 41, Araki '997 discloses a composition for the removal of SOx comprising iron oxide (see column 2, lines 35-40) and 1-80% oxides of copper (see column 3, lines 11-16 and 23-26).

Regarding claim 31-35, Araki '997 discloses cuprous oxide (see Tables 1 and 2) and 1-80% oxides of copper (see column 3, lines 11-16 and 23-26). The oxide product is not disclosed as present in the cuprous oxide.

Allowable Subject Matter

4. Claim 37 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 38-40 are allowed.

5. The following is a statement of reasons for the indication of allowable subject matter: The prior art does not disclose or suggest: 59-76.8% carrier, 5-22% iron oxide, and 18% water in the sulfur scavenging sulfur compound of the instant claim 37; 95-98.875% iron oxide in the sulfur scavenging sulfur compound of the instant claim 38; nor 50-80% water and 5-22% iron oxide in the sulfur scavenging compound of the instant claim 39.

Response to Arguments

6. Applicant's arguments filed 11/29/04 have been fully considered but they are not persuasive.

It is argued that claims 3-37, 41, and 42 require... weight of the composition. This is not persuasive because Matsuda discloses copper oxide may be present in an amount of 2-50% or 4-50% (see column 3, lines 26-29).

It is argued that likewise, Araki et al. also fail... amount of activator. This is not persuasive because Araki discloses 1-80% oxides of copper (see column 3, lines 11-16 and 23-26).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 571-272-1358. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0987.



Edward M. Johnson
Examiner
Art Unit 1754

EMJ

March 7, 2005